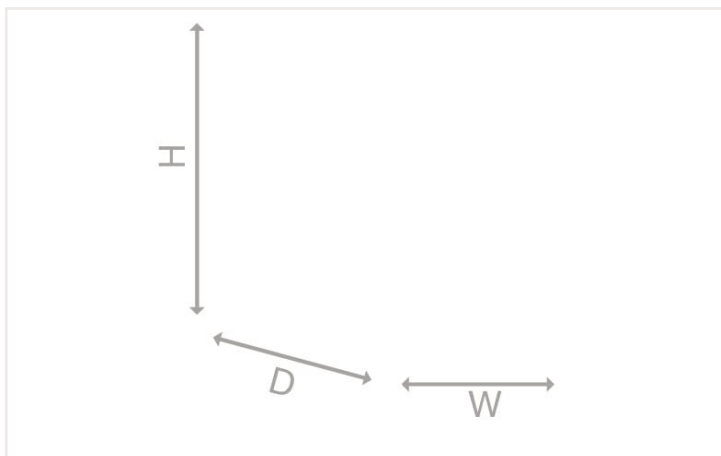
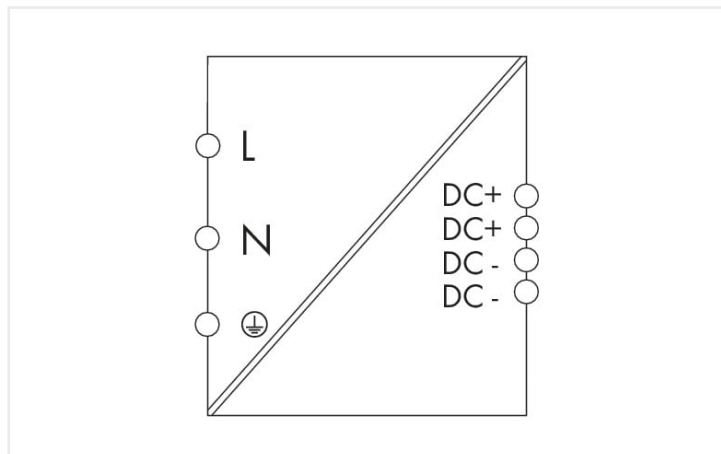


# Data sheet | Item number: 787-712

Power supply; Eco; 1-phase; 24 VDC output voltage; 2.5 A output current; DC-OK LED; 4,00 mm<sup>2</sup>

<https://www.wago.com/787-712>



## Features:

- Switched-mode power supply
- Natural convection cooling when horizontally mounted
- Encapsulated for use in control cabinets
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) per UL 60950-1; PELV per EN 60204

## Technical data

Input		Output	
Phases	1	Nominal output voltage $U_{o\ nom}$	DC 24 V (SELV)
Nominal input voltage $U_{i\ nom}$	1 x AC 110 ... 240 V	Output voltage range	DC 22 ... 28 V (adjustable)
Input voltage range	1 x AC 85 ... 264 V; DC 90 ... 373 V	Default setting	DC 24 V
Nominal mains frequency range	47 ... 63 Hz; 0 Hz	Nominal output current $I_{o\ nom}$	2.5 A (24 VDC)
Input current $I_i$	$\leq 0.7$ A (230 VAC); $\leq 1.2$ A (115 VAC)	Nominal output power	60 W
Discharge current	$\leq 1$ mA	Deviation	$\leq 1$ %
Inrush current	$\leq 30$ A	Residual ripple	$\leq 100$ mV (Peak-to-peak)
Power factor	$\geq 0.5$ (230 VAC)	Overload behavior	Constant power (in overload range: 1.15 ... 1.4 x $I_{o\ nom}$ ); Shutdown and automatic restart in the event of a short circuit
Power factor correction (PFC)	passive		
Mains failure hold-up time	$\geq 20$ ms (230 VAC)		

### Signaling and Communication

Signaling	1 x LED DC OK (green) 1 x Overload LED (red)
Operation status indicator	Green LED (24 VDC OK) Red LED (overload)

### Efficiency/power losses

Power loss $P_I$	$\leq 8.3$ W (230 VAC; nominal load)
Power loss (max.) $P_{I(max)}$	11.5 W (110 VAC / 24 VDC; 2.75 A)
Efficiency (typ.)	86 % (230 VAC)

### Circuit protection

Internal fuse	F 2.5 A / 250 VAC
Backup fusing (required)	An external DC fuse is required for the DC input voltage.
Backup fusing (recommended)	Circuit breaker: 10 A, 16 A; Tripping characteristic: B or C

### Safety and protection

Isolation voltage (pri.-sec.)	DC 4.242 kV
Isolation voltage (pri.-PE)	DC 2.2 kV
Isolation voltage (sec.-PE)	DC 0.7 kV
Protection class	I
Protection type	IP20; per EN 60529
Resistance to reverse feed	$\leq$ DC 28 V
Overvoltage category	II
Pollution degree	2
Transient suppression (primary)	Varistor
Short-circuit-protected	Yes
Open-circuit-proof	Yes
Parallel operation	Yes
Series operation	Yes
MTBF	480,000 h (per IEC 61709)

### Connection data

Connection type 1	Input/output
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 745 Series
Solid conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 4 mm <sup>2</sup> / 28 ... 12 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Note (conductor cross-section)	12 AWG: THHN, THWN

### Physical data

Width	50 mm / 1.969 inches
Height	92 mm / 3.622 inches
Depth from upper-edge of DIN-rail	136 mm / 5.354 inches

### Mechanical Data

Mounting type	DIN-35 rail
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### Material Data

Fire load	4.4 MJ
Weight	470 g

### Environmental requirements

Ambient temperature (operation at $U_N$ )	-10 ... 70 °C
Surrounding air temperature (storage)	-25 ... +85 °C
Relative humidity	≤ 95% (no condensation permissible)
Derating	-3.3 %/K (

### Standards and specifications

Conformity marking	CE
Standards/specifications	EN 62368-1 EN 61204-3 cURus 60950-1 cULus 508 ANSI/ISA 12.12.01 (Class I Div. 2) ATEX IEC Ex

### Commercial data

Product Group	6 (Interface Electronics)
eCl@ss 10.0	27-04-07-01
eCl@ss 9.0	27-04-07-01
ETIM 8.0	EC002540
ETIM 7.0	EC002540
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	CN
GTIN	4045454908195
Customs tariff number	85044082900

### Approvals and certificates

#### General approvals



Approval	Standard	Certificate name
UL Underwriters Laboratories Inc.	UL 508	E255817
UL Underwriters Laboratories Inc.	UL 60950-1	E255815

#### Approvals for hazardous areas



Approval	Standard	Certificate name
ATEX UL International Demko A/ S	EN 60079-0	12 ATEX 0931267 X
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079	TÜV20.1339X
UL UL International Germany GmbH	IEC 60079-0	IECEx UL 10.0006 X
UL UL International Germany GmbH (HAZARDOUS LO- CATIONS)	ANSI/ISA 12.12.01	E198726 Section 5

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-712



Documentation

Bid Text

787-712	12.07.2019	xml 6.84 KB	
787-712	12.07.2019	docx 20.99 KB	

Instruction Leaflet

Primary Switch Mode	V 2.2.7	pdf	
Power Supply ECO-Power	21.12.2020	336.60 KB	

CAD/CAE-Data

CAD data

2D/3D Models 787-712



CAE data

EPLAN Data Portal 787-712	
WSCAD Universe 787-712	
ZUKEN Portal 787-712	

1 Compatible products

1.1 Optional accessories

1.1.1 Ferrule

1.1.1.1 Ferrule



**Item no.: 216-321**  
Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item no.: 216-322**  
Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item no.: 216-241**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



**Item no.: 216-221**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item no.: 216-242**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item no.: 216-262**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



**Item no.: 216-222**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item no.: 216-243**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item no.: 216-263**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



**Item no.: 216-223**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item no.: 216-224**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item no.: 216-244**  
Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

## 1.1.1.1 Ferrule

**Item no.: 216-264**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

**Item no.: 216-284**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

**Item no.: 216-246**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

**Item no.: 216-266**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

**Item no.: 216-286**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue

## 1.1.2 Tool

## 1.1.2.1 Operating tool

**Item no.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

**Item no.: 210-769**

SCREWDRIVER; green